USSR / Farm Animals. Swine Q-4

Abs Jour: Ref Zhur-Biol., No 3, 1958, 12126

Author : Shcherbakov P. I., Bykov P. I.
Inst :
Title : New Development in the Rotation System of Farrowing (Novoye v turovoy sisteme oporosov)

Orig Pub: Svinovodstvo, 1957, No 4, 11-14

Abstract: The article deals with management of farrowing, raising of pigs, and feeding of sows and young pigs at the state farm "Maslovskiy" of the Voronezh oblast.

Card 1/1

BYKOV, P.I.

112-2-3646

Translation from: Referativnyy Zhurnal, Elektrotekhnika, 1957, Nr 2, p. 164 (USSR)

AUTHOR: Bykov, P. I.

TITLE: Contact Machines for Spot Welding Steel Reinforcements (Kontaktnyye mashiny dlya tochechnoy svarki armatury)

PERIODICAL: Sb. materialov po obmenu opytom. Glavpromstroy, 1955, Nr 2, pp. 3-20

ABSTRACT: The production technique and sample operating schedules for spot welding reinforcing mesh and bar-reinforced steel frame construction are discussed. The design and structural characteristics of various types of stationary, single spot welding machines, the АТП-75, the МТМ-75, the МТМ- and the МТП-75 are described. The latter machine can be controlled over a wide range of welding-current passage time (0.04 to 6.75 sec), it can exert high compressions (up to 600 kg), has high productivity (up to 6,000 spots/hr) and is stable in operation. The machine is equipped with an ignitron circuit breaker, and with an electronic time

Card 1/2

Contact Machines for Spot Welding Steel Reinforcements (Cont.)

control which governs the operating cycle of the machine. The upper electrode and pressure are controlled pneumatically during operation. It is advantageous to use special automatic multiple spot welding machines in steel-reinforcement shops. The ATMC = 14 x 75 all purpose welding machine can be used in welding 2,700 mm wide flat, reinforcing mesh from 3 + 3 to 10 + 10 mm diameter wire where the minimum spacing between wires is 100 mm. The machine has 28 welding electrode holders connected to the hydraulic compression system and to 14 welding transformers. The MK-251 machine is used in welding the reinforcement of reinforced concrete columns. The machine has a productivity of approximately 10 seven meter long reinforcements per day.

B.S.B.

Card 2/2

S/186/61/003/003/015/018
E071/E435

AUTHORS: Tseytlin, S.G. and Bykov, P.I.

TITLE: Application of Ammonium Fluoride and Tetrasubstituted Sodium EDTA Salt in the Determination of Radium and its Isotopes

PERIODICAL: Radiokhimiya, 1961, Vol.3, No.3, pp.356-358

TEXT: For the determination of radium and its isotopes by the emanation method, it is necessary to transfer rocks and minerals into solution. Usually this is done by fusion with a mixture of soda, sodium hydroxide and barium chloride. This method is laborious, particularly when large samples (10 to 20 g) are to be treated or when the percentage of silica is high (50 to 70%). The authors developed a simplified method of transfering specimens into solution. The method is based on mixing the sample investigated with ammonium fluoride (4 g of fluoride per 1 g of silica) in an iron crucible and heating it at 600 to 650°C until the evolution of fumes stops. Subsequently, the so treated sample is either dissolved in hydrochloric acid or fused with sodium peroxide, depending on its composition. The analytical procedure is described in detail. A comparison of analytical results obtained

Card 1/2

Application of Ammonium ...

by the usual and proposed methods is given in a table. The results either agree or differ within the limits of the usual analytical error. There are 1 table and 5 Soviet references.

SUBMITTED: June 23, 1960

Card 2/2

BUGAY, P.M.; BYKOV, P.M.; BOGINSKIY, R.M.

Granite as raw materials for manufacturing porcelain for electrical engineering purposes. Stek. i ker. 17 no.10:30-32 '60.(MIRA 13:10)
(Granite) (Electric insulators and insulation)

S/072/62/000/002/001/001
B139/B110

AUTHOR: Bykov, P. M.

TITLE: Pink granite as a raw material for producing high-tension insulators

PERIODICAL: Steklo i keramika, no. 2, 1962, 30 - 32

TEXT: Due to a shortage of feldspar for commercial porcelain, the Yuzhnoural'skiy armaturno-izolyatornyy zavod (South Ural Armature and Insulator Plant) produced in series insulators of a ceramic mass based on pink granite. The latter, obtained from the 6 million ton deposit of Shershni near Chelyabinsk, is mostly of holocrystalline structure with a grain size of 0.2 - 0.6 mm. The mass consists of 48% granite (replacing Alapayevsk pegmatite otherwise used according to formula no. 3), 19% alumina, 25% kaolin, and 8% crushed porcelain. The composition of the mass containing granite is very similar to that of formula 3 (with pegmatite), the amount of rejected, non-fired insulator samples is lower.

Card 1/2

Pink granite as a raw material...

Table 2:

Components of mass	Composition, %: mass according to formula no. 3	mass with granite
feldspar	36.0	34.8
kaolinite	45.0	47.5
quartz	19.0	17.7

Table 3:

Mass	Cracks: after drying, %	after firing, %
with granite formula no. 3	1.5	3.0
	7.0	12.0

After firing, the mass containing granite was of higher static bending strength (583 kg/cm^2 without glaze as compared with 517 kg/cm^2 with formula no. 3). Experimental series of ПМ-4,5 (PM-4,5), П-4,5 (P-4,5), and П-8,5 (P-8,5) insulators met all requirements of the ГОСТ (GOST) 6490-53 testing standard for high-tension insulators. The Institut stekla (Institute of Glass) is mentioned. There are 4 tables and 1 Soviet reference.

Card 2/2

ETKIN, V. S., ISAYEV, S. G., BYKOV, P. N.

Cigarette Manufacture and Trade

Increasing productivity of a Kurkevich" type cigarette packing machine. Tabak 13 no. 1, 1952.

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

TSYGAN, V.T.; CHISTYAKOVA, M.F.; BYKOV, P.N.; GUREVICH, M.A.; SHCHEGOL'KOVA, L.A.

Thermostatic devices for X-ray cameras. Zav. lab. 30 no.5:630 '64. (MIRA 17:5)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redkometallicheskoy promyshlennosti.

BYKOV, P.P.; PONOMAREV, P.A.

In six months labor productivity has increased 14.5 per cent.
Ugol' Ukr. 4 no.8:9-11 Ag '60. (MIRA 13:9)

1. Upravlyayushchiy trestom Oktyabr'ugol' (for Bykov).
2. Glavnyn inzhener tresta Oktyabr'ugol' (for Ponomarev).
(Donets Basin--Coal mines and mining--Labor productivity)

BYKOV, P.P.; MEYYEROV, A.S., red.

[Transit surveying; methodological textbook on surveying for summer practice] Teodolitnaia s"emka; metodicheskoe posobie dlia letnei geodezicheskoi praktiki. Gor'kii, Gor'kovskii inzhenerno-stroit. in-t im. V.P.Chkalova, 1963. 28 p. (MIRA 17:3)

BYKOV, P.P.

[Bench mark leveling, cross sectioning, and surface leveling; methodological textbook on surveying for summer practice] Prodol'no-poperechnoe nivelirovanie i nivelirovanie poverkhnosti; metodicheskoe posobie dlia letnei geodezicheskoi praktiki. Gor'kii, Gor'kovskii inzhenerno-stroitel'nyi in-t, 1963. 23 p. (MIRA 17:3)

BYKOV, P.V.

Effect of the harvesting time of sunflower on the marketing value of seeds. Khar. prom. no.2:37-38 Ap-Je '65. (MIRA 18:5)

BYKOV, P. Ye.

"Problems of the Agronomy of Southern Hemp in the Kolkhozes of Dnepropstrovskaya Oblast." Cand Agr Sci, Khar'kov Order of Labor Red Banner Agricultural Inst imeni V.V. Dokuchayev, Min Higher Education USSR, Khar'kov, 1955. (KL, No 8, Feb 55)

SO: Sum. No. 631, 26 Aug 55-Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (14)

B

BYKOV, R.I.

Principal tectonic features in the Aktyubinsk-Temir region of the Ural piedmont area. Trudy MNI no.14:11-22 '55. (MLRA 8:11)
(Aktyubinsk region--Geology, Structural) (Temir region--Geology, Structural)

BYKOV, R. L.

SHIROKOV, V.L.

11(4) p.2 PHASE I BOOK EXPLOITATION SOV/1492

Moscow. Neftyanoy institut

Voprosy geologii i dobychi nefti (Problems in Geology and Oil Production) Moscow, Gostoptekhizdat, 1958. 202 p. (Series: Its: Trudy, vyp. 22) 1,300 copies printed.

Exec. Ed.: G.F. [illegible]; Tech. Ed.: A.S. Polosina; Editorial Board: K.F. Zhigach, Professor (Resp. Ed.); I.M. Murav'yev, Professor; A.A. Tikhomirov, Candidate of Economical Sciences; V.I. Yegorov, Candidate of Economical Sciences; M.M. Charygin, Professor; F.F. Dunayev, Professor; N.I. Chernozhukov, Professor; Yu.M. [illegible], Professor; I.A. Charnyy, Professor; G.M. Panchenkov, Professor; V.N. Dakhnov, Professor; N.S. Nametkin, Doctor of Chemical Sciences; E.A. Almazov, Docent; V.N. Vinogradov, Candidate of Technical Sciences; V.I. Biryukov, Candidate of Technical Sciences; N.I. Tagiyev, Professor; V.M. Gurevich.

PURPOSE: This book is intended for technical personnel in the oil and gas industries, as well as for instructors and advanced students in petroleum

Card 1/5

[illegible]

[illegible], K.P., Yu.M. Vasil'yev, and V.L. Shirokov. Development of the Principles of Tectonics of Predkavkaz'ye and the Southern Periphery of the Russian Platform 29

Bykov, R.I. Certain Characteristics in the Development of the Southeastern

Card 2/5

Part of the Russian Platform in Sakmarsko-Artinskoye Time (Lower Permian) 63

[illegible], S.S. Oil and Gas-bearing Potential of the Stavropol' Area 78

[illegible], A.A. Classification of Hydrogeological Indices in Evaluating Oil and Gas Potential 91

[illegible], Yu.A., and V.P. Shugrin. Comparison of the Analyses of Dissolved Gases Extracted by Different Methods 98

[illegible], M.A., and G.T. [illegible]. Factors in the Ratio of Gas Recovery From Gas or Oil-Gas Deposits 107

[illegible], R. Ya. Relation Between the Parameters of a Double Electrical Layer on the Surface of Rock Particles and the Diffusion-adsorption Electromotive Force 115

Card 3/5

KAZAKOV, Mikhail Pavlovich; CHARYGIN, Mikhail Mikhaylovich; BYKOV, Risk Ivanovich; VASIL'EV, Yuriy Mikhaylovich; ZNAMENSKIY, Vladimir Vyacheslavovich; SMYSUL'-MULYUKOV, Rustem Badirovich; POLOSINA, A.S., tekhn. red.

[Tectonics and history of the development of the Caspian Depression and adjacent regions in connection with questions of the presence of gas and petroleum] Tektonicheskoe stroenie i istoriia razvitiia Prikaspiiskoi vpadiny i smezhnykh oblastei v sviazi s voprosami neftegazonosnosti. Pod red. M.P. Kazakova i M.M. Charygina. Moskva, Gos. nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, 1958. 402 p. (MIRA 11:9)

(Caspian Depression—Geology, Structural)

BYKOV, R. I.

Gas potential of Pliocene and Post-Pliocene sediments in the northwestern Caspian Sea region. Trudy MINKHiGP no.27:134-150 '60. (MIRA 13:9)
(Caspian Sea region--Gas, Natural--Geology)

S/011/60/000/007/002/002
A054/A129

AUTHORS: Kazakov, M. P., Charygin, M. M., Bykov, R. I., Vasil'yev, Yu. M., Znamenskiy, V. V., Seyful'-Mulyukov, R. B.

TITLE: Comment on the review by G. Ye.-A. Ayzenshtadt, S. N. Koltypin, and N. K. Trifonov on the book "Tectonic Structure and Evolution History of the Pre-Caspian Lowland and Neighboring Areas With Reference to Their Oil and Gas Deposits"

PERIODICAL: Akademiya nauk SSSR. Izvestiya. seriya geologicheskaya, no. 7, 1960, 89 - 94

TEXT: M. P. Kazakov's book referred to in the title was reviewed in Izvestiya akademii nauk SSSR, seriya geologicheskaya, 1960, no. 4, by G. Ye.-A. Ayzenshtadt, S. N. Koltypin and N. K. Trifonov. The review contains several mis-statements which are refuted one by one by the authors of the book in question. As distinct from Ayzenshtadt's review, the book contains the first maps of the facial complexes and layer thicknesses for the entire Caspian Lowland, mainly for the Jurassic system, and it covers a very large territory unknown until now. Contrary to the book by Aysenshtadt et al., in which some parts of the Caspian area are

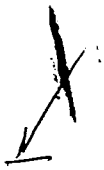
Comment on the review...

dealt with only, Kazakov's book covers a much wider area and describes not only the thickness but also the facies of the entire Jurassic system. Based on an abundance of material, maps for extensive structures, such as those of Novobogata, the Sagiz Highland, the Emba valley, etc. are published for the first time in geological literature. Ayzenshtadt's review criticizes the accuracy of the definition given for the thickness of the mesozoic stratigraphic complexes and mentions 5 points which are inaccurate. These 5 points, however, cannot be considered decisive in a series of tests covering 6,211 measurements, but Kazakov even succeeds in defending the accuracy of the five results objected to in the review. Of the statements made by Ayzenshtadt and his co-reviewers those referring to the Southern Emba plateau are the most important in connection with prospecting for oil and gas in this area. The review questions the data published in the book by Kazakov on the folded structures in the area referred to. However, by 10 deep drillings carried out recently, dislocated and metamorphic sediments of the paleozoicum were surveyed so that the statements contained in the book reviewed are fully confirmed. The data referring to the thickness of the Lower Carbon (more than 2,000 m) and of the Carbon (in total more than 2,500 m) were not correct, according to Ayzenstadt et al. However, the actual values obtained for this carbon layer are the following:

APPROVED FOR RELEASE: 06/09/2000 CIA-RDP86-00513R000307910018-2"

Comment on the review...

for the Upper Carbon: 422m, for the Medium Carbon: 490 m, for the Lower Carbon bed 1,429 m. Thus the entire depth of the carbon layers thus far established totals 2,341 m and this figure still does not represent the total thickness of the Carbon bed. Similarly, all the other criticism put forward by the review is refuted by the authors of the book, not only with the aid of their own material, but also with reference to other books and especially to the surveys and studies carried out by the Vsesoyuznyy aerogeologicheskiy trest (All-Union Aerogeologic Trust) and the Vsesoyuznyy neftyanoy geologo-razvedochnyy institut (All-Union Oil-Geologic Prospecting Institute). There are 11 Soviet-bloc references.



Card 3/3

USPENSKAYA, N.Yu.; BYKOV, R.I.; SUDARIKOV, Yu.A.

Outlook for oil and gas in eastern and central Ciscaucasia and the southern Russian Platform and basic trends in future prospecting. Trudy VNIGNI no.32:211-247 '60. (MIRA 14:7)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im. I.M. Gubkina.
(Caucasus, Northern--Petroleum geology)
(Caucasus, Northern--Gas, Natural--Geology)
(Russian Platform--Petroleum geology)
(Russian Platform--Gas, Natural--Geology)

BYKOV, R.I.; MAL'TSEVA, A.K.; TURANOV, V.A.

Prospects for finding oil and gas in Jurassic sediments of western Uzbekistan and adjacent regions. So.geol. 5 no.5:69-81 My '62. (MIRA 15:7)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti imeni I.M. Gubkina.

(Uzbekistan—Petroleum geology)
(Uzbekistan—Gas, Natural—Geology)
(Turkmenistan—Petroleum geology)(Turkmenistan—Gas, Natural—Geology)

GAVRILOV, V.P.; TURANOV, V.A.; BYKOV, R.I.

History of the development of the southern Aral Sea region in the Cretaceous period. Neftegaz. geol. o geofiz. no.8:15-20 '63. (MIRA 17:3)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im. akademika Gubkina.

MUZYCHENKO, Nina Mikhaylovna; YURKEVICH, Tat'yana Yakovlevna; BAKIROV, A.A., prof., glav.red.; RYABUKHIN, G.Ye., prof., red.; USPENSKAYA, N.Yu.,prof.,red.; ZHDANOV,M.A., prof., red.; DOLITSKIY, V.A., dots., red.; SPIKHINA, A.M., kand. geol. nauk, red.; YUDIN, G.T., kand. geol.-min. nauk, red.; TABASARANSKIY, Z.A., dots., red.; BAKIROV, E.A., dots., red.; BYKOV, R.I., dots., red.; FOMKIN, K.V., kand. geol.-min. nauk, red.; KNYAZEV, V.S., dots., red.; SHIROKOV, V.Ya., st. nauchn. sotr., red.; YUNGAS, S.M., ved. red.; NEVEL'SHTEYN, V.I., ved. red.

[Geological conditions and fundamental characteristics of oil and gas accumulations in the limits of the Epi-Hercynian platform in the south of the U.S.S.R.) Geologicheskie usloviia i osnovnye zakonomernosti razmeshcheniia skoplenii nefti i gaza v predelakh epigertsinskoi platformy iuga SSSR. Pod red. A.A.Bakirova. Moskva, Gostoptekhizdat. Vol.1. [Central Asia] Sredniaia Aziia. 1963. 442 p. Vol.3. [Volga Valley portion of Saratov and Volgograd Provinces] Saratovsko-Volgogradskoe Povolzh'e. 1963. 153 p. (MIRA 17:4)

1. Moscow. Institut neftekhimicheskoy i gazovoy promyshlennosti.

BYKOV, R.I.; MAL'TSEVA, A.K.; TURANOV, V.A.; GAVRILOV, V.P.

Regularities in the distribution of oil and gas fields in the Jurassic sediments of the central part of the Turan Plateau. Trudy MINKHiGP no.43:125-134 '63. (MIRA 17:4)

TURANOV, V.A.; GAVRILOV, V.P.; BYKOV, R.I.; MOSOV, G.N.

Upper Jurassic sediments in the southern Aral Sea Region. Neftegaz, geol. i geofiz. no.4:11-14 '64. (MIRA 17:6)

1. Moskovskiy ordena Trudovogo Krasnogo Znameni institut neftekhimicheskoy i gazovoy promyshlennosti im. akademika Gubkina i trest "Bukharaneftegaz."

TURANOV, V.A.; GAVRILOV, V.P., aspirant; BYKOV, R.I.

Concerning the stratification of the Lower Cretaceous sediments in the southern Aral Sea region. Izv. vys. ucheb. zav.; geol. i razv. 7 no.11:36-41 N '64. (MIRA 18:5)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im. I.M. Gubkina.

BYKOV, R.L.

112-3-6408

Translation from: Referativnyy Zhurnal, Elektrotekhnika, 1957, Nr 3, p. 187 (USSR)

AUTHOR: Bykov, R.L.

TITLE: Electrical Productivity Meter for Excavator " α -3" (Elektricheskiy schetchik proizvoditel'nosti ekskavatora " α -3")

PERIODICAL: Nauch. raboty stud. Sverdl. gorn. in-ta, 1956, sbornik 2, pp. 76-84

ABSTRACT: Bibliographic entry.

Card 1/1

BYKOV, R. YE.

"Characteristics of Color Image and Color Correction in Color Television", Sb. Tr. Stud. Nauch. Obshch. Leningrad. Electrotekh. Inst., No 1, 1953, pp 14-28.

The schematic diagram of color television with successive transmission of three color signals is described. Color correction is analyzed in connection with various illuminations of the transmitted objects. A scheme of correction by amplifying the color signals is suggested.
(RZhFiz, No 1, 1955) SO: Sum. No. 443, 5 Apr. 55

SOV/112-57-6-13466

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1957, Nr 6, p 264 (USSR)

AUTHOR: Gurevich, S. B., Bykov, R. Ye.

TITLE: Effect of the Contents of a Transmitted Object on the Nature of Signal Conversion by a Supericonoscope Camera Tube (Vliyaniye soderzhaniya peredavayemogo ob"yekta na kharakter preobrazovaniya signala peredayushchey trubkoy tipa superikonoskop)

PERIODICAL: Tekhnika televideniya. M-vo radiotekhn. prom-sti SSSR, 1956, Nr 11, pp 46-57

ABSTRACT: Experimental studies of the supericonoscope show that its output signal depends on the so-called "white fill" of the object transmitted. The greater the fill, the greater is the signal value. This relationship is weaker for greater illuminations of the photocathode. The quality of transmission of brightness gradations deteriorates with a low fill factor; with a very low fill, the brightness-gradation transmission is particularly poor for strong signals, i.e., near the white level. The signal value is independent of the white

Card 1/2

Effect of the Contents of a Transmitted Object on the Nature of Signal Conversion . . . .

distribution over the test pattern; it depends only on the fill factor. The signal-fill dependence is not so important for black-and-white TV; in color TV, however, it may impair color transmission because the fill factor may be different for various color components. An increase in the output signal with increase of the fill factor can be explained by the fact that the number of secondary electrons hitting the photocathode increases and the lower equilibrium potential decreases.

A.B.P.

BYKOV, R. Ye.

В. С. Полякин

Современное состояние и перспективы применения телевидения в промышленности, науке и технике в СССР.

Н. Е. Калинс

Разработка унифицированного телевизионного и звукового оборудования различного назначения для телецентров.

Р. Е. Быков,
С. В. Гурвич

Процессы накопления и коммутации в видиконе в переходном режиме.

Р. Е. Быков,
С. В. Гурвич

О влиянии апертуры пучка на структуру потенциального рельефа в видиконе.

11 июня

(с 10 до 16 часов)

В. А. Буланов

Студийная камера цветного телевидения.

В. Н. Балитов

Аппаратура цветного телевидения для Московского телецентра

В. И. Ефимкин

Совместимость систем цветного телевидения с одной поднесущей частотой, выполненных для стандартов ОИР и МККР.

Г. И. Соколов

Преобразование стандартов цветного телевидения

11 июня

(с 18 до 22 часов)

О. В. Емельян-Чохов

Общий комплекс измерений в междугородных каналах цветного телевидения.

Л. И. Шкорин,
Д. Д. Судравский

Проекционные устройства цветного телевидения

А. Н. Иванов

Выбор равносигнального белого цвета для системы цветного и черно-белого телевидения.

А. Г. Бурлаков,
В. М. Зусмановский

Коррекция искажений цветов в цветном телевизионном изображении при передаче кинофильмов

report submitted for the Centennial Meeting of the Scientific Technological Society of Radio Engineering and Electrical Communications im. A. S. Popov (VNORiE), Moscow, 8-12 June. 1959

BYKOV, R. YE., Cand Tech Sci — (diss) "An Analysis of the Formation of the Low-Frequency Component Video Signal by the Supericonoscope and the Vidicon." Leningrad, 1960, 15 pp. (Ministry of Higher and Secondary Specialist Education RSFSR; Leningrad Electrotechnological Institute im V. I. Ul'yanov (Lenin). 200 copies, no price given, List of the Author's works pp 14-15 (10 entries) (KL, 21-60, 123)

69899

S/109/60/005/04/013/028
E140/E435

AUTHORS: Gurevich, S.B. and Bykov, R.Ye.

TITLE: The Effect of the Beam Aperture on Commutation of the Potential Relief in a Vidicon

PERIODICAL: Radiotekhnika i elektronika, 1960, Vol 5, Nr 4, pp 638-648 (USSR)

ABSTRACT: This paper was presented at the XIV Conference of the Scientific-Technical Society for Radio Engineering and Electrical Communications imeni A.S.Popov, Leningrad, April 21, 1959

It is shown that the effective beam aperture in a vidicon is much greater than the physical cross-sectional dimensions of the beam in the tube and is approximately 2 to 3 line widths. Nevertheless the resolution of real vidicons is approximately 500 lines horizontally and 600 lines vertically in interlaced scanning. This is explained by the time variation of commutation of a given point of the target as the beam passes over it. The author shows experimentally that the majority of the charge is removed within a time short with respect to the time in which a beam of the effective diameter

Card 1/2

69899

S/109/60/005/04/013/028
E140/E435

The Effect of the Beam Aperture on Commutation of the Potential Relief in a Vidicon

passes over the point. This compensates the effect of beam broadening due to the effects of the potential relief on the target in the horizontal direction. In the vertical direction it is claimed that the mere fact of the use of interlace permits obtaining the indicated resolution but with reduced contrast since the effective accumulation time is only that of a single field and not of a frame, as the spot discharges two line widths or more. The measured potential relief at the surface of the layer corresponding to coarse picture details is 0.5 to 12 V and has substantial influence on the form, dimensions and trajectory of the commutating beam close to black-white boundaries. To improve vidicon characteristics, it is recommended to increase the capacitance corresponding to an element of the layer and improve the commutation efficiency. There are 12 figures and 6 references, 5 of which are Soviet and 1 German.

SUBMITTED: May 26, 1959
Card 2/2

BYKOV, R.Ye., kand.tekhn.nauk

Use of television methods in medicine. Vest.khir. 87 no.11: 11-16 N '61. (MIRA 15:11)
(TELEVISION) (MEDICAL ELECTRONICS)

BYKOV, S.

Training equipment for farm mechanization schools. Prof.-tekh.obr. 11 no.3:7 '54. (MLRA 7:8)

1. Master uchilishcha mekhanizatsii sel'skogo khozyaystva no.5 (Moldavskaya SSR)
(Farm mechanization--Study and teaching)

24.7700

39028
S/139/62/000/003/009/021
E036/E435

AUTHORS: Oreshkin, P.T., Bykov, S.B.

TITLE: On relaxation processes in dielectrics and semiconductors

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Fizika, no.3, 1962, 65-73

TEXT: Expressions are derived for the electric current in aluminium oxide in the intrinsic conduction range (above 1000°C) which can also be applied to other dielectrics and semiconductors at high temperatures. The aim was to clarify the conduction mechanisms at high temperatures, where possible practical developments are in thermistors which are impeded by the decay of direct current in aluminium oxide at high temperatures. P.T.Oreshkin has shown earlier that this decay is a rectification effect and thus high temperature rectifiers can be envisaged. Two extreme cases are considered:
1) The intrinsic conduction is solely due to Al^{3+} ions whilst the O ions are fixed; it is assumed that a barrier layer forms at the electrodes in which the concentration of ionized molecules is a

Card 1/4

On relaxation processes ...

function of the contact potential and the applied voltage. The residual current, i.e. that finally reached some time after application of the voltage, is derived. At small voltages, the derived expression is in good agreement with experiment.
2) The residual current is entirely of electrons, the ions having been removed from the barrier layer by the large field; the formula for the residual current consists of two terms, one proportional to the voltage and the other independent of it and corresponding to the reverse polarization current usually measured under short circuit conditions. Qualitative agreement is obtained with experiment for voltages greater than 50 to 100 V; the measured short-circuit current was independent of voltage. The decrease of current with time depends on previous history (whether subjected to voltages before, type and quality of contacts). The varied nature of the results up to 1300°C suggests a range of time constants of which only a "tail" is observed. Measurement of the residual and short-circuit currents yields reproducible results if the sequence of measurements is through rising temperature and voltage.
Card 2/4

39038
S/139/62/000/003/009/021
E036/E435

On relaxation processes ...

Conductivity measurements with short duration low voltages indicate that the change of current is due mainly to depletion of the charge in the barrier layer. Comprehensive measurements of current against voltage are reported on several samples under various conditions (pressure exerted in differing directions, various electrode materials). For a particular sample the activation energy, derived from the variation of current with temperature, increases with voltage from 1.9 ev at 10 V to 2.57 ev at 450 V. This could be explained on this model by the barrier layer being depopulated of its ions as the voltage increases and the conduction being by electrons with a higher activation energy than that corresponding to dissociation of molecules. The role of polarization is quite small and no impurity effects were detected. A sample was tested as a thermistor for 400 hours at 1000 to 1300°C. Scatter from the calibration curve with respect to temperature was 1.5%.

This paper was presented at the Third Inter-University Conference on Contemporary Techniques in the Field of Dielectrics and Semiconductors.

Card 3/4

39038
S/139/62/000/003/009/021
E036/E435

On relaxation processes ...

There are 6 figures.

ASSOCIATION: Sibirskiy metallurgicheskiy institut imeni S. Ordzhonikidze (Siberian Metallurgical Institute imeni S. Ordzhonikidze)

SUBMITTED: January 2, 1961

Card 4/4

S/170/62/005/008/006/009
B104/B102

AUTHORS: Bykov, S. B., Karateyev, A. D., Oreshkin, P. T., Rayeva, I.S.

TITLE: Microthermistors for working temperatures up to 200°C

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 5, no. 8, 1962, 93-96

TEXT: 1 - 1.5 mm long and 0.8 mm thick cylinders, small grains and beads, were produced from the three powder mixtures (1) 75% CuO + 25% Fe_2O_3, (2) 68% MnO_2 + 32% Co_2O_3, (3) 70% MnO_2 + 30% NiO with the aid of press molds. The first mixture was calcined at 1000°C, the other two at 1200°C for 2 hours. The ends of the specimens were silver plated, with iron or silver wires brazed onto them. After aging, these thermistors were calibrated in the temperature range from 20 to 200°C. The mean temperature coefficient α and the quantity B, which enters into the relation for the resistance $R = Ae^{xp(B/T)}$ have the following values for the three compositions:

Card 1/3

Microthermistors for working ...

	α_{20°	α_{100°	α_{200°	B
(1)	3.6%	2.0%	1.2%	2830 °K
(2)	6.7%	5.9%	2.75%	12980 °K
(3)	4.1%	2.5%	1.0%	3660 °K

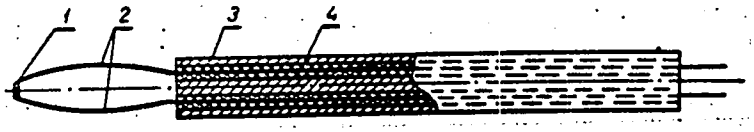
The calibration curves reproduce well and no aging occurs with continuous operation. The thermistor has a low heat capacity and can be connected with elastic conductors (Fig. 1). There are 2 figures.

ASSOCIATION: Sibirskiy metallurgicheskiy institut imeni Sergo Ordzhonikidze, g. Novokuznetsk
(Siberian Metallurgical Institute imeni Sergo Ordzhonikidze, Novokuznetsk)

SUBMITTED: October 4, 1961

Microthermistors for working ...

Fig. 1. Thermistor. Legend: (1) pickup; (2) silver or steel wires; (3) two-channel insulation.



Card 3/3

S/126/62/013/002/010/019
E021/E480

18.1100

AUTHORS: Finkel', V.M., Zraychenko, V.A., Maslovskaya, Z.A., Bykov, S.B.

TITLE: The mechanism of crack propagation in steel

PERIODICAL: Fizika metallov i metallovedeniye, v.13, no.2, 1962, 263-267

TEXT: The propagation of cracks was investigated on a standard micro-apparatus supplied with a device for deforming the samples. The samples had a double-sided groove of 2.5 to 3 mm depth and 50 to 70° angle. A transformer steel and steel СТ3 (St 3) were used. The root of one of the grooves was observed; cracks were produced under conditions of constant loading and the process was recorded on a cine-film. The time to fracture varied within wide limits (seconds to hours) depending on the value of the superimposed stresses and the orientation of the grains in the region of the crack. The speed of the cine-camera was therefore varied from 150 sec per frame to 60 - 70 frames per sec. Results showed that the crack originates from a highly localized plastic deformation zone, extending in the case of the transformer steel to

Card 1/ 2

a depth of 1 to 3 grains. Transcrystalline propagation occurs by the projection of a "fan" of slip bands. These join in the deformation zones with subsequent growth of cracks. The possible nucleation of cracks in the regions of defects, not rare in transformer steels, must also be considered. These regions were observed as bends in the groups of slip planes. The plastically deformed zone is the direct source of microcracks. In addition, it activates the formation of fracture nuclei in front of the fracture in regions where slip planes are still not observed. During this process the grain, in which deformation and fracture are taking place, is bordered by extremely fine boundaries. The appearance of boundaries is very marked in the latter phases of separation of the metal. The grains, as it were, are formed into "globules". This is evidence of the part played by grain boundary flow and slip in the process of fracture. There are 4 figures.

ASSOCIATION: Sibirskiy metallurgicheskiy institut
(Siberian Metallurgical Institute)

SUBMITTED: January 11, 1961

ACCESSION NO: AP4013315 S/0032/64/030/002/0234/0235

AUTHORS: Oreshkin, P. T.; Tret'yakov, A. V.; By*kov, S. B.; Grachev, A. V.; Karateyev, A. D.

TITLE: Thermistors for measuring surface temperatures of bodies

SOURCE: Zavodskaya laboratoriya, v. 30, no. 2, 1964, 234-235

TOPIC TAGS: thermistor, surface temperature, thermistor SMI-1, thermistor SMI-2, thermistor ITV-275

ABSTRACT: The working portions of thermistors SMI-1 and SMI-2 represent grains 0.5 x 0.5 x 0.5 mm in size, consisting of 75% CuO and 25% Fe_2O_3. Two opposite surfaces of each grain are coated with silver. In a contactless thermistor SMI-1 two steel wires are soldered to the silvered surfaces; in a contact thermistor SMI-2 one of the leads is a spring and the other a wire. The working parts are coated either with enamel or with lacquer, the former coating serving up to temperatures of 300-350C, the latter up to 80-100C. Preliminary graduating of thermistors was accomplished on a hollow steel roller with a nichrome heating element installed along its axis. Surface temperatures were measured with a thermocouple. Thermistor SMI-1 was enclosed in a textolite cup and fixed on the roller.

Card 1/2

ACCESSION NO: AP4013315

Contactless thermistor ITV-275 was held at 0.75 ± 0.15 mm from the roller. In both cases the temperatures were somewhat lower than those shown by the thermocouple. This difference increased with the distance from the roller, with the speed of revolution of the roller, and with air circulation. However, for continuously fluid-cooled rollers, the contactless and the contact thermistors gave equal readings. Contactless thermistors were found adaptable to stationary conditions. Readings obtained with a contact thermistor SMI-2 varied with the amount of pressure applied to the spring. For a wet roller these readings were similar to those obtained with SMI-1. The contact thermistor was found useful for measuring surface temperatures of ferromagnetic bodies. It provides readings every 5-7 seconds. Orig. art. has: 2 figures.

ASSOCIATION: Sibirskiy metallurgicheskiy institut i Uralmashzavod (Siberian Metallurgical Institute and Uralmashzavod)

SUBMITTED: 00	DATE ACQ: 26Feb64	ENCL: 00
SUB CODE: SD	NO REF SOV: 002	OTHER: 000

Card 2/2

OVCHARENKO, F.D.; BYKOV, S.F.; DUMANS'KYY, A.V., diysnyy chlen.

Characteristics of the water bond in clays and the kinetics of dehydration. Dop.AN URSR no.3:142-146 '51. (MLRA 6:9)

1. Akademiya nauk Ukrayins'koyi RSR (for Dumans'kyy). 2. Instytut zahal'noyi ta neorhanichnoyi khimiyi Akademiyi nauk Ukrayins'koyi RSR (for Ovcharenko and Bykov). (Clay)

USSR

Hydrophilic and adsorption properties of some naturally occurring sorbents. F. T. Ovcharenko, I. B. Neimark, I. B. Slinyakova, and S. F. Bykov. *Dopovidi Akad. Nauk Ukr. R.S.R.* 1952, 147-51 (Russian summary, 152).—Native Ukrainian clays, a Kamenets-Podol'skii bentonite (I), an Askangel' (II), and a Dubravitskii kaolin (III) were investigated *per se* or after activation with ions. The influence upon the properties decreased in the series: $Cu^{++} > H^+ > Na^+ > K^+$. Example: dried I can bind 19.53 g. H_2O/100 g. and the heat of wetting for natural I is 10.6, dried I 20.4, Cu—I 19.1, H—I 18.2, Na—I 12.2, and K—I 7.74 cal./g. I. Cu—I adsorbs 0.22, H—I 0.175, and K—I 0.144 ml. C_6H_6/g.; the values for MeOH and H_2O show a similar trend. From satd. vapor I will adsorb 19.8, II will adsorb 9.0, and III will adsorb 12.9% C_6H_6. Isotherms are presented for the activated and unactivated clays for adsorption of MeOH, H_2O, and heptane. It is concluded that I would be the best clay for the industrial drying of gases and for the adsorption of valuable vapors from gasses, if these are present in low concns. only.

Werner Jacobson

Bykov, S.F

The hydrophily of bentonites as influenced by their physicochemical nature. S. D. Ovcharenko and S. F. Bykov (Inst. Gen. and Inorg. Chem., Acad. Sci. Ukr. S.S.R., Kiev). Kolloid. Zhur. 16, 134-40(1954); cf. Ukrain. Khim. Zhur. 19, 134(1953).—One specimen of kaolin (I) and 4 bentonites were studied. The bentonites were "askangel" (II) (contg. 75–80% montmorillonite, 10% kaolinite, 10% biotite and hydrobiotite, etc.), "gumbrin" (contg. 99% montmorillonite), and Uzhgorod clay (contg. 95% beidellite, 4.5% quartz, etc.). The ion-exchange capacity of these samples was 9, 80, 102, 100, and 40 mg.-equiv./100 g., resp. The heat Q of wetting was 1, 11, 21, 20, and 11 cal./g., whence the sp. surface area was 38, 424, 787, 735, and 422 sq.cm./g. The amt. of H_2O adsorbed at 20° from vapor at 55% relative humidity was 1.1, 10, 19.0, 19.2, and 9.2%, i.e. approx. proportional to Q. When the cations of the natural clays were displaced by other cations, the Q decreased from Ca to H, Na, and K-satd. clay. The pore vol. (from d.) increased from II III I, but the max. adsorption of C_6H_6 was on III greater than on I because bentonites swelled in solvent vapors (also H_2O and MeOH). The vapor adsorption of III was great when III was satd. with Ca^{++}, and least for K-satd. III. The hydrophily of bentonites was greater, the greater was their ratio $SiO_2:Al_2O_3$ and the greater their montmorillonite content. III was as good as synthetic adsorbent.

J. J. Bikerman

Bykov, S.F.

USSR .

The hydrophily of bentonites as influenced by their physico-chemical nature. P. D. Ovcharenko and S. F. Bykov. *Colloid J. U.S.S.R.* 16, 143-8(1954)(Engl. translation).—See *C.A.* 48, 8620g. H. L. H.

OVCHARENKO, F.D.; BYKOV, S.F.

Effect of various factors on hydrophilic properties of bentonites.
Bent. gliny Ukr. no.1:29-38 '55. (MIRA 12:12)

1.Institut obshchey i neorganicheskoy khimii AN USSR.
(Bentonite)

RASTRENENKO, A.I.; BYKOV, S.F.

Studying hydrophilic and sorptive properties of Cherkassy bentonites.
Bent. gliny Ukr. no.2:94-101 '58. (MIRA 12:12)

1.Institut obshchey i neorganicheskoy khimii AN USSR.
(Cherkassy Province--Bentonite)

GORBUNOV, I.P.; GLUKHOV, V.P.; KOTLUKOV, K.G.; MOSKALEV, V.D.; SIPAYLOV, Yu.A.; SMBYAN, N.K.; SHUTOV, M.I.; BYKOV, S.G., red.; KANEVSKAYA, M.D., red.; BLAZHENKOVA, G.I., tekhn.red.

[Training methods for members of civil air defense groups] Metodika podgotovki lichnogo sostava grupp samozashchity. Moskva, Izd-vo DOSAAF, 1959. 165 p. (MIRA 13:3)

1. Vsesoyuznoye dobrovol'noye obshchestvo sodeystviya armii, aviatsii i flotu.
(Air defenses)

BYKOV, S.I.

Manufacture of ceramic screens of local raw material. Vod. i san. tekh. no.9:39-40 S '61. (MIRA 14:11)
(China--Sewage disposal plants--Equipment and supplies)

BYKOV, S. P.

"The Forests of Moscow Oblast." Cand Agr Sci, Moscow Forestry Inst, Moscow, 1953. (RZhBiol, No 3, Oct 54)

, Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (10)

So: Sum. No. 481, 5 May 55

USSR / Forestry. Forest Management K-4

Abs Jour: Ref Zhur-Biol., No 10, 1958, 43940

Author : Bykov, S. P.

Inst : The All-Union Scientific Research Institute for Forestry and Mechanization of Forest Management

Title : On the Reconstruction of Non-Valuable Forests

Orig Pub: Sb. rabot po lesn. kh-vu. Vses. n.-i. in-t; esovodstva i mekhaniz. lesn. kh-va, 1956, vyp. 32, 109-115

Abstract: This study defines more precisely the concept of "forest restoration" and examines the basic forest renewal methods directed at the restoration of the principle species in plantings that have lost their economic value. The study also characterizes the

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Abs Jour: Ref Zhur-Biol., No 10, 1958, 43940

economic significance of the thin-leaf plantings of the seed origin, and conditions determining the necessity of the restoration of the shoots of the thin-leaf tree stands. It is pointed out that the reconstruction should be carried out in regions of intense forestry and that it should be confined only to the young growth of the I and II age classes having in its composition 0.2 to 0.3 of the principal variety or a sufficient number of its reliable young trees. In the absence of principal kinds or if its young growth is insufficient, the restoration of the chief variety can be carried out efficiently by means of cultures after continuous felling of the non-valuable tree stand.
L. V. Nesmelov

BYKOV, S. S.

36948. FRYDOVICH, G. M., BYKOV, S. S. i ITINA, I. A. Nekotoryye funktsii organa zreniya u bol'nykh gipertonicheskoy ionizatsiyey. V ogl. 3-y avt: Itina M.A. Trudy Uzbek. gos. nauch. - issled. in-ta kurortologii i fizioterapii im, Semashko, sb. 11, 1949, s. 203-07.

SO : Letopis' Zhurnal'nykh Statey, Vol. 50, Moskva, 1949

BYKOV, S. S.

Mbr. Eye Dept., Tashkent Clinical Emergency Hospital -c1949-.

"Surgical Treatment of Alar Pellicle", 28, No. 2, 1949-.

BYKOV, S. S.

Mbr. Eye Dept., Tashkent Clinical Emergency Hospital -c1949-.

"A Method of Local Anaesthesia in the Evisceration of the Eyeball," Vest. Oftalmol., 28, No. 2, 1949.

BYKOV, Stepan Sergeyevich; YERZINA, Z.K., red.; SAYTANIDI, L.D., tekhn.red.

[Contemporary of October] Rovesnik Oktiabria. Moskva, Izd-vo M-va sel.-khoz. RSFSR, 1957. 55 p. (MIRA 11:6)
(State farms)

BYKOV, Stepan Sergeyevich, zhurnalist; BEREZIN, I.A., red.; KHAR'KOV, S.F., tekhn. red.

[Force of example] Sila primera. Moskva, Izd-vo "Sovetskaia Rossiia," 1961. 68 p. (MIRA 15:3)
(Novaya Usman' District--State farms)

BYKOV, S.Ya., inzh.; SIDOROVICH, A.P., inzh.; TRUSH, V.I., inzh.

Bridge supports on shell tubings. Transp.stroi. 10 no.3: 24-28 Mr '60. (MIRA 13:6)
(Bridges--Foundations and piers)

RYAKHOVSKIY, I.A., starshiy inzh.; BYKOV, S.Ye., starshiy elektromekhanik

Group call transmission network. Avtom., telem.i sviaz' 6 no.4:33-34 Ap '62. (MIRA 15:4)

1. Kishinevskaya distantsiya signalizatsii i svyazi Moldavskoy dorogi.

(Telegraph)

BYKOV, V.

Master of Chemical Sciences

"Dry Ice Production", "The Vladivostok Brewery".

Krasnoye Znamya Vladivostok, June 1947

S/066/60/000/006/008/009
A053/A029

AUTHORS: Bykov, V., Ionov, A.

TITLE: Electronic Level Signaling Device ЭСУ-I (ESU-I) in Refrigerators on Board Ship

PERIODICAL: Kholodil'naya tekhnika, 1960, No. 6, pp. 52-53

TEXT: The ESU-1 electronic level signaling device is used for keeping the filling-up of apparatus under control. Its performance is based on the change of electric capacity depending upon the level of the medium to be measured. The ESU-1 devices have been installed for the first time in freezers on board ship of large trawlers. In the evaporators, intermediate reservoirs and batteries of direct evaporation where vigorous boiling of ammonia causes drops of saturated vapors and particles of liquid to hit the electrodes, it happens that these emit false signals. As a remedy the authors have developed a protective device as shown on diagrams 1, 2 and 3 which consists of a guard covering the electrode. It is equipped with a tube connecting at one end with the vapor space and at the other end with the liquid medium. In order to increase the dependability of the control,

Card 1/4

S/066/60/000/006/008/009
A053/A029

Electronic Level Signaling Device ЭСУ-I (ESU-I) in Refrigerators on Board Ship

on each of the four liquid separators two electronic level signaling devices are installed, viz., an upper and a lower device. The latter prevents liquid ammonia from getting into the liquid separator by closing a solenoid valve on the liquid ammonia supply line leading to the air coolers. As soon as the compressor has drawn off the ammonia excess and the level becomes normal, the solenoid valve opens and liquid ammonia enters the air cooler. The upper device cuts out the compressor as soon as liquid ammonia touches its electrode. There are 3 diagrams.

Card 2/4

S/066/60/000/006/008/009
A053/A029

Electronic Level Signaling Device ЭСУ-I (ESU-I) in Refrigerators on Board Ship

Figure 1

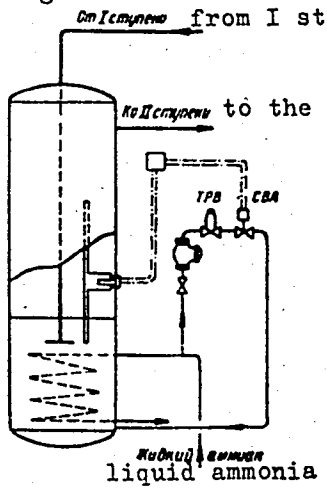

Figure 1:

Installation of an ESU-1 device with protection on an intermediate reservoir

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S/066/60/000/006/008/009
A053/A029

Electronic Level Signaling Device УЭУ-I (ESU-I) in Refrigerators on Board Ship

Figure 2

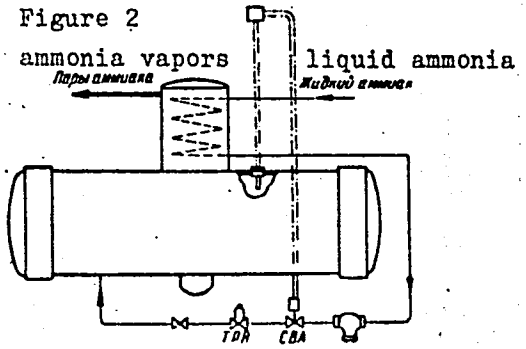


Figure 2: Installation of ESU-1 on an evaporator

Figure 3

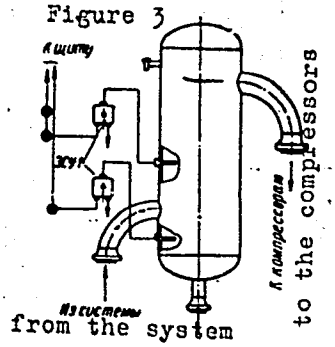


Figure 3: Installation of ESU-1 on a liquid separator

Card 4/4

BYKOV, V., inzh.

Simplified formulas for calculating the capacity of pipelines. Mias. ind. SSSR 31 no.4:17-19 '60. (MIRA 14:7)

1. Gosudarstvennyy institut po proyektirovaniyu predpriyatiy myasnoy promyshlennosti.
(Meat industry)
(Pipelines)

BYKOV, V., starshiy leytenant.

Land of unfrightened birds. Sov.voin 38 no.16:30-31 Ag '56. (MLRA 9:12)

(Kola Peninsula--Description)

BYKOV, V., kandidat tekhnicheskikh nauk; NIKITENKO, Yu., kandidat tekhnicheskikh nauk.

Errors of automatic radio direction finders with a trace system in presence of radio station interferences. Mor.flot no.2:23-24 F '57. (MLRA 10:3)

1. ANII (for Bykov) .2.Leningradskoye vyssheye inzhenernoue morskoye uchilishche.

(Radio direction finders)

BYKOV, V., kapitan

Catch under the ice. Starsh.-serzh. no.2:27 F '62. (MIRA 15:4)
(Ice fishing)

AUTHOR: Bykov, V. 107-58-6-38/58

TITLE: TV Reception on the Drifting Station "SP-6" (Priyem televizionnykh peredach na dreyfuyushchey stantsii "SP-6")

PERIODICAL: Radio, 1958, Nr 6, p 42 (USSR)

ABSTRACT: A group of radio amateurs on the drifting scientific research station "SP-6" (Severnyy polyus - 6=North Pole 6) organized a systematical observation of remote TV broadcasts. The observations were conducted during July - November 1957, when the drifting station was in the vicinity of the Janet and Henriette islands. The author describes some of the dates and times of reception from Vladivostok, a distance of 4,010 km. It was not possible to receive even fragments of telecasts from Magadan. The quality of the received TV signals, as a rule, was low. Occasionally only the sound accompanying the TV broadcast was heard. The distance between the station "SP-7" and Vladivostok was 4,500 km and there was no reception of TV signals at all. Fragments of European (Russian) telecasts were occasionally received at "SP-6". A TV set of type "Znamya" was used with some minor modifications which increased the sensitivity to 10 - 20 microvolt. Rhombic antennas were used. The reception of TV casts was

Card 1/2

TV Reception on the Drifting Station "SP-6" 107-58-6-38/58

based on ionization processes of the E_2 layer.

Card 2/2 **1. Television-Reception 2. Antennas-Application**

BYKOV, V., kapitan

Underwater hunting. Voen. vest. 42 no.7:64-66 Jl '62.
(MIRA 15:6)
1. Deystvitel'nyy chlen Geograficheskogo obshchestva SSSR.
(Diving, Submarine)

1. BYKOV, V. [A.]
2. USSR (600)
4. Gliders (Aeronautics)
7. On wings of an ascending current., Tekh. molod., 20, no. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

BYKOV, V.A.

New data on respiratory and circulatory changes in suffocation and on inhibition of the respiratory center. Arkh. pat., Moskva 14 no.1:18-31 Jan-Feb 1952. (CIML 22:1)

1. Of the Department of Pathological Physiology, Military Medical Academy imeni S. M. Kirov, Leningrad.

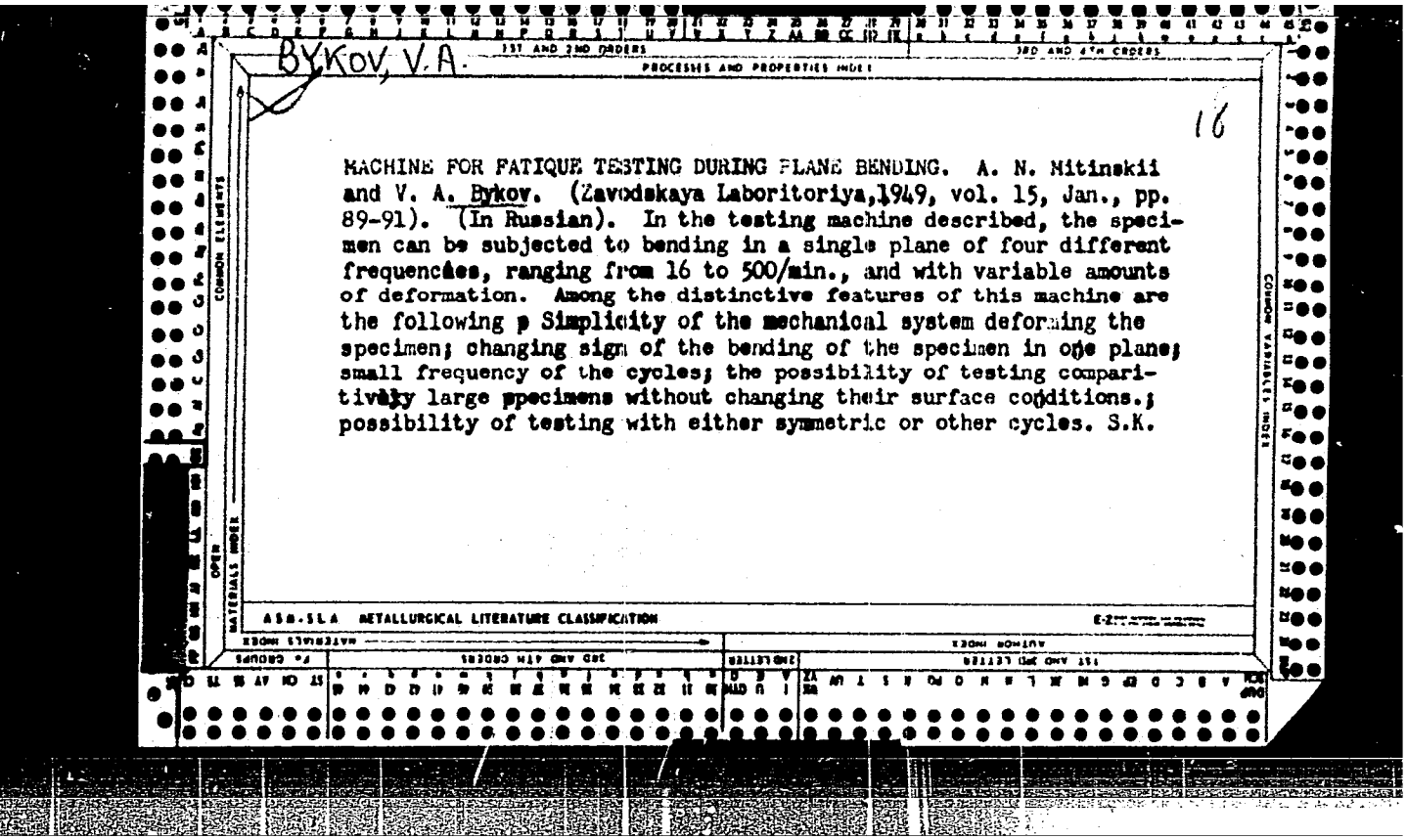
Bykov, V. A.

EXCERPTA MEDICA Sec.2 Vol.10/2 Physiology,etc Feb57

828. BYKOV V.A. Med. Inst. of Saratov. *Physiological mechanism of sleep FIZIOL. Z. 1956, 42/7 (597-603) Illus. 2 (Russian text)
Sleep is not only a result of fatigue of the cerebral cortex but is also produced by generalization of inhibition, which develops in the trigeminal centre, through the effect of continuous stimulation of receptors in the upper respiratory pathways.
Simonson - Minneapolis, Minn.

BYKOV, Vladimir Andreyevich; NOVINSKIY, Georgiy Davydovich; SHALYT, German Mikhaylovich; POLIVODA, A.I., kand.tekhn.nauk, nauchnyy red.; STAROSTENKOVA, M.M., red.izd-va; ATROSHCHENKO, L.Ye., tekhn.red.

[Electronics in medicine] Elektronika v meditsine. Moskva, Izd-vo "Znanie," 1960. 29 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.8, Biologiia i meditsina, no.21). (MIRA 13:12)
(MEDICAL ELECTRONICS)



BYKOV, V.A.

16

MACHINE FOR FATIQUE TESTING DURING PLANE BENDING. A. N. Mitinskii and V. A. Bykov. (Zavodskaya Laboritoriya,1949, vol. 15, Jan., pp. 89-91). (In Russian). In the testing machine described, the specimen can be subjected to bending in a single plane of four different frequencies, ranging from 16 to 500/min., and with variable amounts of deformation. Among the distinctive features of this machine are the following p Simplicity of the mechanical system deforming the specimen; changing sign of the bending of the specimen in one plane; small frequency of the cycles; the possibility of testing comparitively large specimens without changing their surface conditions.; possibility of testing with either symmetric or other cycles. S.K.

3298. Bykov, V. A., Some singularities in the resistance of rolled steel blanks to plastic deformation and failure (in Russian), *Trudi Leningr. Korablestroit. in-ta* no. 14, 135–144, 1954; *Ref. Zh. Mekh.* 1956, Rev. 4063.

The resistance of steel to plastic deformation and failure is investigated in relation to the arrangement of the samples with reference to the direction of rolling. The results obtained confirm earlier data, e.g. Ya. B. Friedman, S. I. Rajner, *Zav. laboratoriya*, 11, 2/3, 193–209, 1945.

Simultaneously, the duration of the resistance to semi-elastic torsion of structural steel is investigated. It is found that the residual strains can be calculated by the formulas derived from the behavior of an ideally plastic material.

A substantial difference is disclosed between the development of the rupture stresses in torsion and tension, while the true shear stress remains practically constant (1.26 and 1.21, respectively). This is to be explained by the anisotropy of rolled steel.

Courtesy Referativnyi Zhurnal I. A. Razov, USSR

Translation, courtesy Ministry of Supply, England

BYKOV, V. A.

521* Resistance to Repeated Bending of Steel Strips With Weld-Attached Transverse Ribs. Soprotivlenie mnogokratnomu izgibu stal'nykh polos s privarennym poperechnym rebrom. (Russian.) V. A. Bykov and V. A. Nikitin. *Svarochnoe proizvodstvo*, 1955, no. 11, Sept., p. 8-10.

Fatigue and yield point compared in low-alloy and C steel test pieces; factors affecting development and position of failure. Graphs, tables, diagrams. 3 ref.

BYKOV, V.H.

124-58-9-10577

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 9, p 161 (USSR)

AUTHORS: Bykov, V. A., Artem'yev, N. S., Kostichev, Yu. V., Levanov, V. I.

TITLE: On the Consistency of Generalized Plastic Strength Data of Ship-building Steels (O skhodimosti obobshchennykh plasticheskikh soprotivleniy sudostroitel'noy stali)

PERIODICAL: Tr. Leningr. korablestroit. in-ta, 1955, Vol 16, pp 50-55

ABSTRACT: Results of tests relative to pure flexure, tension, and torsion are presented for a number of ship-building steels (grades not indicated). The investigation included the conditions in which plastic behavior occurred, also short-term-failure and long-term-strength criteria. A correlation of test results relative to the pure flexure of narrow strips and plate showed a good substantiation of the Henke-Huber-von Mises condition of plasticity

$$\sqrt{\sigma_1^2 - \sigma_2\sigma_1 + \sigma_2^2} = \sigma_0 \qquad (1)$$

A correlation of test results relative to tension and torsion of solid circular specimens shows a substantiation not only of

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124-58-9-10577

On the Consistency of Generalized Plastic Strength Data of Shipbuilding Steels

condition (1) but also of the criterion of the maximal tangential stress

$$\sigma_1 - \sigma_3 = \sigma_o \qquad (2)$$

The test results show that relationships (1) and (2) may be used as strength criteria relative to plastic deformation, but that they cannot be expected to serve as failure (ultimate-strength) criteria.

V. S. Namestnikov

1. Steels--Mechanical properties 2. Steels--Test methods

Kafedra soprotivleniya materialov Leningradskogo korablestroitel'nogo instituta (for Bykov)

Card 2/2

SOV/124-58-11-13478

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 11, p 216 (USSR)

AUTHOR: Bykov, V. A.

TITLE: On the Strength of Plastically Compressed Springs (O soprotivlenii plasticheski obzhatykh pruzhin)

PERIODICAL: V sb.: Vopr. proyektir., izgotovleniya i sluzhby pruzhin. Moscow-Leningrad, Mashgiz, 1956, pp 122-147

ABSTRACT: Curves of elastic-plastic tensile, bending, and torsional strength are constructed for 60S2 spring steel. The true bending and torsional stresses were determined from the nominal stresses according to the formulas of A. Nadaya. Similar curves are constructed for compression springs, also. Therein, in lieu of the angle of twisting the value of the settling of the spring, which is proportional thereto, is introduced into the A. Nadaya formula. Tests with six springs made of 60S2 steel established the satisfactory agreement of the actual values of the settling with a calculated value obtained under the assumption of "ideal plasticity". Fatigue tests of a small number of plastically compressed springs of one type established a 30% increase in the fatigue limit on a 1 to 5 x 10^6 basis as compared with the initial

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On the Strength of Plastically Compressed Springs

uncompressed springs.

M. Ya. Shashin

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SHEVANDIN, Ye.M., kand. tekhn. nauk; KOZLYAKOV, V.V., kand. tekhn. nauk; MAKSIMADZHI, A.I., inzh.; BYKOV, V.A., kand. tekhn. nauk; YEVSTIFEYEV, V.A., kand. tekhn. nauk; BELKIN, V.P., doktor tekhn. nauk; REZNITSKIY, L.Ya., kand. tekhn. nauk; PUTOV, N.Ye., prof.; SHIMANSKIY, Yu.A., akademik; GUREYEV, V.A., inzh.; VAKHARLOVSKIY, G.A., inzh.; KERICHEV, V.M.; KVASHUK, N.F., inzh.; NOGID, L.M., prof.; REVZYUK, G.A., inzh.; ARKHANGORODSKIY, A.G., kand. tekhn. nauk; YEFREMOV, inzh.; OSMOLOVSKIY, A.K., kand. tekhn. nauk.

General discussion. Trudy NTO sud. prom. 7 no.1:112-152 '56. (MIRA 10:12)

1. TSentral'nyy nauchno-issledovatel'skiy institut im. A.N. Krylova (for Shevandin). 2. Leningradskiy korablestroitel'nyy institut (for Kozlyakov, Bykov, Putov, Nogid). 3. TSNIISTEF (for Maksimadzhi). 4. TSentral'noye konstruktorskoye byuro Ministerstva sudostroitel'noy promyshlennosti, g. Gor'kiy (Yevstifeyev, Kvashuk, Revzyuk). 5. TSentral'noye-proyektno-konstruktorskoye byuro Ministerstva morskogo flota (for Reznitskiy). 6. Ministerstvo sudostroitel'noy promyshlennosti (for Gureyev). 7. Gosudarstvennyy soyuznyy proyektnyy institut (for Vakharlovskiy). 8. Zavod "Krasnoye Sormovo" (for Kerichev). 9. NKI (for Arkhangorodskiy). 10. Ministerstvo rechnogo flota (for Yefremov). 11. TSentral'nyy nauchno-issledovatel'skiy institut morskogo flota (for Osmolovskiy).

(Shipbuilding)

Bykov V.A.

SUBJECT: USSR/Welding 135-2-2/12

AUTHOR: Bykov, V.A. University Lecturer

TITLE: Endurance limit of narrow steel strips and steel slabs containing welded joints. (Predel vynoslivosti stal'nykh uzkikh polos i plastin so svarnymi shvami).

PERIODICAL: "Svarochnoye Proizvodstvo", 1957, # 2, pp 6-11 (USSR)

ABSTRACT: Experimental investigation, performed on low-carbon weldable steel. The test specimens used were in the form of smooth strips, and with welded-on vertical ribs. Processes of formation and propagation of fatigue cracks under various stress conditions, and the influence of material thickness were investigated. The lowest endurance limit was found in specimens with ribs.

The electrodes УОНИ 13/15, УОНИ 13/45А, and СВ 1А, and flux ОСЦ-45А have been used. The testing equipment was the same as described in (1). The welding tests were performed under the direction of the plant technologist, S.M. PEVZNER.
There are 2 tables, 5 diagrams, 8 drawings. The article contains 6 references (all Russian).

Card 1/2

TITLE: Endurance limit of narrow steel strips and steel slabs containing welded joints. (Predel vynoslivosti stal'nykh uzkikh polos i plastin so svarnymi shvami). 135-2-2/12

INSTITUTION: (LENINGRADSKIY KORABLESTROITEL'NYY INSTITUT) Leningrad Shipbuilding Institute.

PRESENTED BY:

SUBMITTED:

AVAILABLE: At the Library of Congress.

Card 2/2

BYKOV, V.A.,

"Endurance Limit of Narrow Steel Strips and Plates with Welded Butts," Svarochnoye Prozvodstvo, no 2, 1957, U.

AUTHOR: Bykov, V.A. 119-58-5-3/11

TITLE: Automation of the Most Important Branches of Industry (Avtomatizatsiya osnovnykh otrasley promyshlennosti)

PERIODICAL: Priborostroyeniye, 1958, Nr 5, pp 7-11 (USSR)

ABSTRACT: I. Power Production.
During the past 10 years mechanization and automation was considerably extended and improved in heat-engine generating stations, especially with respect to the process of combustion, hydraulic feeding and superheating of steam. The introduction of the automation of the combustion process alone led to a saving of 350.000 t of coal in 1957.
It was possible to reduce the staff by 60 to 67% by the automation of control- and transformer stations.
All modern knowledge was utilized for the projecting and extending of large power centers in the European part of the USSR, in Siberia and in the Caucasus.

II. Ferrous Metallurgy.
Successes obtained by mechanization in casting may be expressed

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as follows: The life of the furnaces was increased by 7 up to 10% and 2% of coke could be saved.
Economy will even be better as soon as full automation of furnace operation is introduced. A means of automation will still have to be found for the following problems: Dephosphatization, degasing and heating of metal troughs, representation of the melting process as an analytical function.

III. Mining Industry.
The ore-working industry, although it has attained a remarkable level, still lags behind similar work in the USA with respect to mechanization. Here strong measures have to be taken and the amount of work to be performed cannot be fully given.

IV. Chemical Industry.
Here it must especially be pointed out that complex automation in this branch of industry requires special capital as otherwise the high demand for artificial materials, mineral manure, synthetic rubber and synthetic fibers cannot be satisfied.
In December 1957 a decisive conference attended by all parties interested took place and useful measures were worked out.

Automation of the Most Important Branches of Industry

119-58-5-3/11

V. Oil Industry.

For this industry, the main process essentially has already been highly mechanized. What, however, deserves to be criticized in this branch is that the auxiliary- and conveyer works are hardly mechanized at all and even fewer of them are automatized.

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1. Power production—Automation

Card 3/3

AUTHOR: Bykov, V. A. SOV/32-24-9-27/53

TITLE: The Plasticity and Brittleness of Structural Steel According to the Data of an Eccentric Extension of Notched Samples (Plastichnost' i khrupkost' konstruktsionnoy stali po dannym vnetsentrennogo rastyazheniya nadrezannykh obraztsov)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 9, pp 1116-1119 (USSR)

ABSTRACT: According to the data obtained by A. B. Bagsar (Bagzar) (Refs 1,2) and by N. A. Kahn and E. A. Imbembo (N. A. Kan and Ye. A. Imbembo) (Ref 3), the testing of plane, notched samples by eccentric extension results in two types of destruction of steel (the ductile and the brittle one), thus yielding the corresponding plasticity and ductility data. The tests described in the paper under discussion were conducted at different temperatures with notched samples of shipbuilding steel. Subject to the ductility allowance at a given test temperature, three different states could be observed - the ductile state, the state of limited ductility, and the brittle state - for each of which data tables and illustrations are given. It is assumed that the spread of plasticity corresponds to the cross

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The Plasticity and Brittleness of Structural Steel According to the Data of an Eccentric Extension of Notched Samples

section of the sample, as can be seen from the deviation of the eccentric extension diagram from the straight line at a stress P_T. After the characteristic stresses, the conditional limiting stresses were determined. It has been observed that the stresses are similar to the analogous properties for gagarin (gagarinskiy) samples of the same material.
There are 4 figures, 1 table, and 5 references, 2 of which are Soviet.

ASSOCIATION: Leningradskiy korablestroitel'nyy institut (Leningrad Shipbuilding Institute)